Appl. No. 10/612,257 Amdt. dated December 18, 2009

Reply to Office Action of September 18, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

 (Currently Amended) A method of updating a supply plan used to process customer requests in an available-to-promise (ATP) system, the method comprising:

a supply chain planning component of the ATP system updating a model of a supply chain for one or more products sold by the ATP system;

the supply chain planning component of the ATP system copying a current supply plan used by the ATP system to process customer requests to create a second supply plan; thereafter, receiving a first plurality of customer requests at the ATP system and processing orders from the requests against the current supply plan with the ATP system while running the model of the supply chain with the second supply plan as part of a process that creates a new supply plan;

after the new supply plan is created, a synchronization program of the ATP system synchronizing the new supply plan by processing with the ATP system orders from the first plurality of customer requests scheduled against the current supply plan into the new supply plan, wherein the synchronizing process is stopped prior to synchronizing all the orders in the first plurality of requests into the new supply plan; thereafter, temporarily stopping promising orders with the ATP system while synchronizing with the ATP system all remaining orders from the first plurality of requests not synchronized during the synchronizing process into the new supply plan; and after the remaining orders from the first plurality of requests are processed with the ATP system, replacing the current supply plan used by the ATP system with the new supply plan so that the ATP system processes future customer requests against the new supply plan.

2. (Previously Presented) The method of claim 1 wherein the step of replacing the current supply plan with the new supply plan is performed by changing a pointer to

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the new supply plan and setting a flag associated with the new supply plan to indicate that the new supply plan is available for ATP processing.

- (Previously Presented) The method of claim 1 wherein an exception is generated if a promise made against the current supply plan cannot be made against the new supply plan.
- (Original) The method of claim 3 wherein the exception causes a message to be generated and available to a planner for processing.
- (Original) The method of claim 3 wherein the exception causes a message to be sent to a planner for processing.
- (Previously Presented) The method of claim 1 wherein the step of synchronizing the new supply plan with the current supply plan comprises stopping synchronization when it is determined that a predetermined number of requests still need to be synchronized.
- (Original) The method of claim 6 wherein the predetermined number is calculated by system 10 based on an average time of synchronizing each request and a desired system downtime entered by a planner.
- (Original) The method of claim 1 further comprising, prior to running the
 model, capturing a snapshot of data representing actual sales and promised requests for use in
 creation of the new supply plan.
- (Original) The method of claim 1 further comprising creating a summary table from the new supply plan that can be used by the ATP system to quickly retrieve summarized availability information without computing availability from more detailed supply and demand tables.

- (Original) The method of claim 1 further comprising pre-allocating products available for promising in the new supply plan in accordance with previously defined business objectives of an organization.
- 11. (Previously Presented) The method of claim 1 further comprising, after replacing the current supply plan with the new supply plan, receiving a second plurality of customer requests by the ATP system and promising orders from the second plurality of requests against the new supply plan.
- (Previously Presented) The method of claim 1 wherein the synchronizing process is stopped when a number of outstanding orders not synchronized into the new plan reaches a threshold number.
- (Original) The method of claim 12 wherein the threshold is a user defined threshold.
- 14. (Currently Amended) A method of managing available-to-promise sales orders, the method comprising:

an order processing component of an available-to-promise (ATP) system receiving a first plurality of requests from customers before creating a new supply plan;

the order processing component of the ATP system promising orders from the first plurality of requests against a first supply plan used by the ATP system;

a supply chain planning component creating the new supply plan with the ATP system;

an order processing component receiving <u>at the ATP system</u> a second plurality of requests from customers while the new supply plan is being created <u>by the ATP system</u>, wherein the second plurality of requests is received <u>at the ATP system</u> after the first plurality of requests;

the order processing component promising with the ATP system orders from the second plurality of requests against the first supply plan:

a synchronization program of the ATP system synchronizing with the ATP <u>system</u> a first portion of the first plurality of requests between the first supply plan and the new supply plan;

the synchronization program stopping synchronization with the ATP system after synchronizing the first portion of the first plurality of requests between the first supply plan and the new supply plan;

the order processing component temporarily stopping processing orders <u>with the ATP system</u> while processing <u>with the ATP system</u> a second portion of the first plurality of requests between the first supply plan and the new supply plan and while processing <u>with the ATP system</u> the second plurality of requests;

the supply chain planning component invalidating with the ATP system the first supply plan;

the supply chain planning component activating with the ATP system the new supply plan;

the order processing component receiving at the ATP system a third plurality of requests from customers, wherein the third plurality of requests is received after the second plurality of requests and after the first supply plan is invalidated and the new supply plan is activated; and

the order processing component promising orders from the third plurality of requests with the ATP system against the new supply plan.

- (Previously Presented) The method of claim 14 further comprising copying the first supply plan and creating the new supply plan from the copy of the first supply plan.
- (Previously Presented) An available-to-promise (ATP) system for processing customer requests, the system comprising:

one or more items of hardware operable to execute one or more components, the components comprising:

a supply chain planning component configured to allow a planner to update a model of a supply chain for one or more products sold by the ATP system; and an order promising component configured to allow a planner to update a current supply plan used to process requests with a new supply plan by

copying a current supply plan used by the ATP system to process customer requests to create a second supply plan;

thereafter, receiving a first plurality of customer requests at the ATP system and promising orders from the first plurality of requests against the current supply plan while the ATP system runs the model of the supply chain process with the second supply plan as part of a process that creates a new supply plan;

after the new supply plan is created, synchronizing orders from the first plurality of customer requests scheduled against the current supply plan into the new supply plan by processing a first subset of the plurality of customer requests against the new supply plan until a threshold number of orders in the first plurality of requests is reached:

stopping synchronization of orders of the first plurality of customer requests prior to synchronizing all the orders of the first plurality of customer requests;

thereafter, temporarily stopping promising orders from new customer requests received at the ATP system while checking all remaining orders from the first plurality of requests not checked during the synchronizing process against the new supply plan; and

after the remaining orders from the first plurality of requests are processed, switching the new supply plan for the current supply plan so that the ATP system can process future customer requests against the new supply plan.

- 17. (Original) The system of claim 16 further comprising a demand planning component configured to allow a planner to create a demand plan that can be used by the supply chain planning component to model a supply chain.
- (Original) The system of claim 16 wherein the threshold number is a user defined limit.

- 19. (Previously Presented) The method of claim 1 further comprising synchronizing a first subset of the second plurality of requests scheduled against the current supply plan into the new supply plan by processing the second plurality of requests against the new supply plan.
- 20. (Previously Presented) The method of claim 19 further comprising: temporarily stopping promising orders; and synchronizing all remaining requests from the second plurality of requests not synchronized during the synchronizing the first subset.
- 21. (Previously Presented) The method of claim 1, wherein the synchronization process is stopped prior to synchronizing a predetermined number of orders remaining in the first plurality of requests taken after a predetermined time.
- 22. (Previously Presented) The method of claim 1, wherein the synchronization process is stopped prior to synchronizing a predetermined number of orders in the first plurality of requests based on a predetermined percentage of orders that can be processed in a predetermined period of time.